

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

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September 11, 1997

Mr. John D. Wagoner U.S. Department of Energy 825 Jadwin, MSIN: A7-50 Richland, WA 99352

Mr. Henry J. Hatch Fluor Daniel Hanford, Inc. 2420 Stevens Ctr., MSIN: H5-20 Richland, WA 99352

Mr. David B. Van Leuven Rust Federal Service of Hanford, Inc. P.O. Box 700, MSIN: H6-10 Richland, WA 99352

Dear Messrs. Wagoner, Hatch, and Van Leuven:

Re: Approval of Grouping Rationale for Waste Stream Testing and Time

Extension for Waste Analysis Plan (WAP Addendum) at the 222-S Laboratory

On the Company of These March 25, 1997, Notice of

Complex per Corrective Measures Two and Three, March 25, 1997, Notice of

Correction

The Washington State Department of Ecology (Ecology) met with representatives from the U.S. Department of Energy (USDOE), Fluor Daniel Hanford Incorporated (FDH), Waste Management Federal Services of Hanford (WMF), and WMF's corporate parent, Waste Management Incorporated (WMX) on August 21, 1997. The meeting was conducted to address outstanding compliance issues related to Ecology's March 25, 1997, Notice of Correction, and specifically, clarification of Corrective Measures Two and Three within the March 25th Notice of Correction. The purpose of this letter is to: (1) address the request made at the August 21, 1997, meeting by USDOE and its contractors to extend the compliance date for submitting an addendum to the 219-S Waste Analysis Plan (WAP Addendum) to address verification of incoming waste per Corrective Measure Three, (2) resolve Ecology's questions concerning selection of representative waste streams for confirmatory analytical testing per Corrective Measure Two, and, (3) approve the rationale for



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grouping analytical methods performed in the 222-S Laboratory Complex for representative testing per Corrective Measure Two. At the August 21, 1997, meeting, Ecology granted verbal approval for an additional 30 days to submit the WAP Addendum.

Corrective Measure Three in the March 25th Notice of Correction required USDOE and its contractors to conduct verification of all incoming waste to the 219-S tank system to ensure incompatible, prohibited, or inadequately documented wastes are not accepted and/or mixed within the 219-S system. USDOE and its contractors were to have submitted an addendum to the 219-S Waste Analysis Plan (WAP Addendum) which detailed verification parameters to achieve adequate waste verification. USDOE and it's contractors submitted a WAP Addendum on April 28, 1997, however this version failed to meet the requirements of Corrective Measure Three. Ecology then issued a letter on July 11, 1997, detailing deficiencies in USDOE and the contractor's April 28th submittal.

As agreed in the August 21, 1997, meeting, Ecology herein formally grants an extension until September 22, 1997, to complete and submit the 219-S WAP Addendum per Corrective Measure Three within the March 25th Notice of Correction. Also, as a result of this meeting, Ecology understands USDOE and its contractors will utilize comments provided to them in completing the WAP Addendum from Ecology's July 11, 1997, letter, "219-S Waste Analysis Plan Addendum Deficiencies." Until the WAP Addendum is approved by Ecology, off-unit waste may only be accepted into the 219-S tank system on a case-by-case basis with prior approval by Ecology.

Corrective Measure Two in the March 25th Notice of Correction required USDOE and its contractors to ensure all waste streams generated in the 222-S Laboratory Complex are accurately described. To meet this requirement, the March 25th Notice of Correction required confirmatory analytical testing be conducted on all waste streams generated within the 222-S Laboratory Complex to verify the accuracy of all waste stream descriptions as contained within each analytical method's waste stream fact sheets. The March 25th Notice of Correction provided USDOE and its contractors the option to group wastes streams with similar chemical properties so that a representative waste stream from each group could be tested as opposed to testing every waste stream generated within the 222-S Laboratory Complex. The rationale for this grouping was subject to pre-approval by Ecology prior to analytical testing of the waste stream selected to represent each group. This grouping rationale was due to Ecology on July 8, 1997, but was not received from USDOE and its contractors until July 15th. The July 15th submittal to Ecology was incomplete. Upon Ecology's insistence, the complete submittal was finally received July 31, 1997.

Ecology approves the "Technical Rationale for Grouping 222-S Laboratory Complex Waste Streams for Sampling and Analysis" (Grouping Rationale) submitted by USDOE and its contractors on July 31, 1997, and as revised to incorporate resolution to the questions

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presented to USDOE and its contractors by Ecology at the August 21, 1997, meeting. Ecology conducted a review of the Grouping Rationale and developed a draft review paper listing major and minor concerns regarding the structure of the Grouping Rationale and its implementation. This draft paper was reviewed with USDOE and its contractors at the August 21, 1997, meeting to clarify Ecology's expectations for completion of Corrective Measure Two in the March 25th Notice of Correction. At the August 21, 1997, Ecology advised USDOE and its contractors that these questions would be revised to include USDOE and the contractor's responses to them and included in this letter to serve as guidance regarding Ecology's expectations for completion and implementation of the Grouping Rationale. I have provided, as an enclosure to this letter, the questions presented to USDOE and its contractors at the August 21, 1997, meeting and the responses to each of Ecology's questions by USDOE and its contractors to these questions.

One of Ecology's major concerns in the Grouping Rationale is the frequency basis used to select representative waste streams for analysis. This concern is explained in detail in the attachment to this letter; however, USDOE and its contractors have agreed to test two analytical method waste streams in addition to the seven waste streams previously selected per the Grouping Rationale to address Ecology's concerns in this matter. These additional waste streams are documented below. If future testing of 222-S Laboratory Complex waste streams is necessary, the Grouping Rationale must use frequency criteria for selecting representative waste streams based on a time period (i.e., six months) immediately preceding the sampling date unless extraordinary reasons exist for the use of some other time period.

In concert with the questions presented to USDOE and its contractors referenced above, Ecology's approval of the Grouping Rationale as transmitted in this letter is subject to the following conditions:

- Waste stream 1 of 1 within procedure LA-631-001 and waste stream 1 of 1 within procedure LA-212-106 will be analyzed immediately upon the accumulation of sufficient waste to supply sample material. These procedures' waste streams will be analyzed in addition to the seven procedures selected for analysis per the Grouping Rationale as submitted to Ecology by USDOE and its contractors on July 31, 1997.
- 2. The Grouping Rationale will contain a clear definition of the category "aqueous waste with miscible organics" that specifies the expected organic content of the waste.
- 3. The Grouping Rationale will contain a clear definition of the category "oxidizing/reducing aqueous waste stream."

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Please be advised that completion of Corrective Measure Two, per the March 25th Notice of Correction, includes diligent implementation of the Grouping Rationale. Implementation of the Grouping Rationale will be assessed during a future inspection of the 222-S Laboratory Complex.

If you have any questions or concerns regarding this letter, please feel free to contact me at (509) 736-3031.

Sincerely,

B. le helen

Bob Wilson, Compliance Inspector Nuclear Waste Program

BW:rb Enclosure

cc:

Tom Teynor, USDOE William Adair, FDH Duane Renberger, WMH Mary Lou Blazek, ODOE

Administrative Record: 222-S Laboratory Complex and 219-S Tank System